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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,843	07/23/2001	Daniel C. Carter	P07087US00/BAS	8801

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EXAMINER	
SONG, MATTHEW J	
ART UNIT	**PAPER NUMBER**
1765	9

DATE MAILED: 07/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/909,843	CARTER, DANIEL C.	
	Examiner	Art Unit	
	Matthew J Song	1765	

-- The MAILING DATE of this communication appears on the cover she t with th correspondence address --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 May 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 5-16* is/are pending in the application.

4a) Of the above claim(s) *11-15* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 5-10 and 16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Claims 1-10 and 16 in Paper No. 8 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 5-10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter (US 5,419,278) in view of Miller (US 5,384,103) or Tabler (US 4,600,103).

Carter discloses an apparatus for using in carrying out a chemical or biological process, note entire reference, comprising a stackable tray **12** containing at least one sealable well **14** in which a protein crystallization is performed, where the tray has an upper surface substantially coplanar with an upper opening in the sealable well (Fig 1). Carter also discloses the tray is constructed of a transparent moldable plastic material or glass and clear plastic tape is used to seal the tray (col 6, ln 1-67). Carter also discloses a hanging drop protein crystallization (col 1, ln 55-67) and a protein solution (col 8, ln 1-67). Carter also discloses ledges for coverslips, this reads on applicant's sealable with a coverslip (col 7, ln 20-30).

Carter does not discloses the side walls extend beyond the lowermost surface of the sealable well, having a lower end configuration so as to from an outer base capable of allowing

the tray to be stacked on the outer portion of the upper surface of a second stackable tray positioned below the first tray while maintaining separation between the upper openings of the second tray and the lower surface of the sealable wells of the first tray so as to allow stacking of the trays without a lid.

In an apparatus for stacking trays, note entire reference, Miller teaches feet **82**, **84**, **86**, this reads on applicant's extended sidewalls beyond the lowermost surface of the sealable well, of a tray **12** are contoured to securely engage the sides of a tray placed beneath then at their corners and the feet permit trays to be interlocked when they are stacked, whether covers are used or not (col 2, ln 30-67 and Fig 1). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Carter with Miller because stacked trays are stacked more securely and are able to withstand below without the contents of the tray becoming dislodged, whether or not a cover is used (col 8, ln 1-35).

Referring to claim 6, the combination of Carter and Miller teaches all of the limitations of claim 6, as discussed previously, except the apparatus further comprises an automated system for stacking and unstacking the stackable trays.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Carter and Miller by adding an automated system for stacking and unstacking the stackable trays to reduce manufacturing time and possible contamination. Also automating a manual activity is obvious (MPEP 2144.04).

Referring to claim 7, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. The apparatus taught by the combination of

Carter and Miller has all of the structural features, as applicant, and would be capable of the intended use claimed by applicant.

Tabler teaches a stackable tray apparatus comprising a tray stacked in two or more levels adapted to be handled by automated equipment and the tray comprises high side walls which extend below the midplane at the outer edge so that one tray may be stacked on a like tray in a interlocking arrangement (Fig 9-11), this reads on applicant's extended sidewall beyond the lower most surface of the sealable well, note entire reference. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Carter with Tabler because the interlocking portions of the tray prevent the trays from shifting, thereby increasing the stability of a stacked arrangement.

Referring to claims 3-4 and 7, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. The apparatus taught by the combination of Carter and Tabler has all of the structural features, as applicant, and would be capable of the intended use claimed by applicant.

Referring to claim 6, the combination of Carter and Tabler teaches automated equipment used to handle trays ('103 col 2).

Response to Arguments

4. Applicant's arguments filed 5/5/2003 have been fully considered but they are not persuasive.

Applicant's arguments against Carter in view of Miller have been considered but have not been found persuasive. Applicant alleges Miller does not teach a tray wherein the bottom tray is away from the top tray, however, this is not the case because Miller teaches each foot member

90, 92, 94, and **96** includes at least two cylindrical stepped regions **98** and **100** and the stepped region **100** abut the upper edges of the tray's walls (col 4, ln 64 to col 5, ln 11 and Fig 1). Therefore, the stepped region **100**, which abuts the tray's walls, will provide separation between two stacked trays.

In response to applicant's argument that Miller and Tabler is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Miller and Tabler are reasonably pertinent to the problem with which the applicant is concerned, which is an improvement in stacking trays, which Miller and Tabler are related. Miller teaches stacking trays with or without lids, which is the problem with which the applicant was concerned.

Applicant's argument that the present invention is an improvement over stacking crystallization trays and not recognized by the prior art is noted but is not found persuasive. Applicant's intended use of the tray is for protein crystallization, which is different from the use of the trays taught by Miller and Tabler is not persuasive because a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Also,

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McCorkle, Jr. et al (US 5,906,165) teaches an apparatus for securely stacking trays with an extension of the side **8**.

Breen (US 5,054,629) teaches an adjustable means **2** for stacking trays.

McPherson et al (US 5,096,676) discloses an apparatus for protein crystallization, comprising a stackable tray containing at least one sealable well **20** having a substantially coplanar surface with an upper opening in the sealable well and a flange portion of the side wall, where the side walls having a lower end configuration so as to form an outer base (Figs 1-6 and col 3-6). McPherson et al also discloses a thin plastic material having an adhesive on the lower surface to seal the wells **20,** the tray is made of a plastic and the well **20** is filled with a protein solution (col 4, ln 1-67).

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J Song whose telephone number is 703-305-4953. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin L Utech can be reached on 703-308-3868. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Matthew J Song
Examiner
Art Unit 1765

MJS
July 9, 2003

BENJAMIN L. UTECH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700